

**DETAILED ACTION**

**Response to Amendment**

1. Applicant's amendment filed on January 16, 2009 has been considered and entered in full.
2. Applicant's arguments with respect to respective amended claims have been considered and are persuasive; therefore all the rejections on the respective claims have been withdrawn.

***Examiner's Amendment***

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's attorney/agent of record, Mr. Art Brion, Registration No. 51,374, on 02/09/2009, Examiner's amendment:

***In The Claims***

- (a) The following changes to the claims have been approved by the examiner and agreed upon by applicant:

(i) Replace the subject matter of claim 30 as presented in the amendment filed on 01/16/2009 with:

**Examiner's amendment:** "A computer readable storage medium having stored thereon at least an executable command for when executed on a computer resulting in performance of the steps of :

- a) receiving the multi-dimensional data, the multi-dimensional data comprising a plurality of data vectors indicative of an image of an object;
- b) separating the plurality of data vectors into at least two clusters based on similarity of the data vectors such that similar data vectors are grouped together into at least one of said at least two clusters;
- c) providing each of the at least two clusters to at least a compression engine for processing;
- d) determining a plurality of codevectors through training for approximating each of the data vectors of a cluster of the at least two clusters with a fidelity above a predetermined threshold based on the data vectors contained in the cluster;
- e) encoding each of the data vectors of a cluster using a codevector of the plurality of trained codevectors;
- f) storing the plurality of trained codevectors in a codebook; and,
- g) storing in an index map an index for each of the data vectors of a cluster indicative of a codevector's location within the codebook,  
wherein the data vectors are partitioned into the at least two clusters based on the distance of a data vector to the centroid of each of the at least two clusters, and  
wherein said data vectors are spectral data vectors having multi-spectral data, and  
wherein said separation of said data vectors into clusters reduces artificial visual boundaries in a decompressed version of said image".

***Allowable Subject Matter***

**Reasons of Allowance:**

4. Claims 1-9, 11, 17, 30, 31 and 32 (renumbered as 1-14) are allowed.

The following is an examiner's statement of reasons of allowance:

The reasons of allowance for claims 1, 30 and 31 should be evident from the applicant's arguments with respect to the amended claims as filed in the amendment filed on 01/16/2009. Therefore claims 1, 30 and 31 are allowed. All other claims depending on claims 1, 30 and 31 are allowable at least by dependency on claims 1, 30 and 31.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella, can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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/Manav Seth/  
Examiner, Art Unit 2624  
February 09, 2009

/Matthew C Bella/  
Supervisory Patent Examiner, Art Unit  
2624